ErbB SURFACE RECEPTOR COMPLEXES AS BIOMARKERS

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Abstract of the Invention

The invention is directed to a new class of biomarker in patient samples comprising dimers of ErbB cell surface membrane receptors. In one aspect, the invention includes a method of determining the status of a disease or healthful condition by correlating such condition to amounts of one or more dimers of ErbB cell surface membrane receptors measured directly in a patient sample, in particular a fixed tissue sample. In another aspect, the invention includes a method of determining a status of a cancer in a specimen from an individual by correlating measurements of amounts of one or more dimers of ErbB cell surface membrane receptors in cells of the specimen to such status, including presence or absence of a pre-cancerous state, presence or absence of a cancerous state, prognosis of a cancer, or responsiveness to treatment. Preferably, methods of the invention are implemented by using sets of binding compounds having releasable molecular tags that are specific for multiple components of one or more types of receptor dimers. After binding, molecular tags are released and separated from the assay mixture for analysis.

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